Implementation of Condom Social Marketing in Louisiana, 1993 to 1996

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ABSTRACT

Objectives. This article describes the implementation and impact of the first statewide condom social marketing intervention in the United States.

Methods. A statewide social marketing program made condoms freely available in 93 public health clinics, 39 community mental health centers, 29 substance abuse treatment sites, and more than 1000 businesses in neighborhoods with high rates of sexually transmitted diseases (STDs) and HIV. Surveys about condom use were conducted annually.

Results. Between 1994 and 1996, more than 33 million condoms were distributed without significant opposition. Over time, self-reported condom use at the last sexual encounter increased among African American women (from 28% in 1994 to 36% in 1996), particularly African American women with 2 or more sex partners (from 30% to 48%). Condom use at the last sexual encounter increased among African American men (from 40% in 1994 to an average of 54% in 1996). The number of reported sex partners did not increase.

Conclusions. Condom social marketing can be successfully implemented in the United States. The widespread availability of free condoms is associated with increased condom use, particularly among persons at high risk for STDs and HIV. (*Am J Public Health.* 1999;89:204–208)

Social marketing uses the elements of price, placement, promotion, and product to introduce a product or behavior for the public benefit.[1] Social marketing of condoms is a key element of the global strategy for the control of HIV,[2–4] but it has not been widely adopted in the United States.[5–7] Elements of condom social marketing that manipulate the price of condoms, increase condom placement, and target promotion of condoms to the population at risk improve access to condoms to groups who could benefit from their availability.

Surveys have found that persons at high risk for HIV infection are already very knowledgeable about the effectiveness of condoms in preventing disease transmission[8,9]; however, this knowledge is not associated with condom use.[10–13] We hypothesized that increasing condom accessibility would increase condom use. First, removing the structural barriers created by the high cost of condoms and the low concentration of condom outlets may increase the number of condoms that persons obtain, thereby increasing the likelihood that a condom is available at the time of a sexual encounter. Second, increasing the presence of condoms in the environment may indirectly increase individual condom use by implying that condoms are acceptable, thus influencing social norms. In addition, when a trusted health care provider supplies condoms, it lends authority and credibility to the importance of condoms in disease prevention.

Except for the issue of condom availability in public schools, improving condom availability has not been a major focus of HIV prevention efforts in the United States, perhaps because many people believe that condoms are already adequately available. Although condoms are sold in most supermarkets and drugstores, there are still many barriers to the purchase of condoms by individuals. These barriers include embarrassment, lack of confidentiality, cost, and lack of planning for sexual encounters.[13–15] The widespread availability of free "self-service" condoms may reduce embarrassment, increase confidentiality, and minimize the need for planning (given that condoms may be accessible at many locations).[16]

In response to the HIV epidemic and the high rates of other sexually transmitted diseases (STDs), particularly syphilis, the Louisiana Department of Health and Hospitals developed a statewide social marketing campaign designed to increase accessibility of condoms by providing them in a targeted fashion at a vastly increased number of locations, particularly health clinics and small businesses in neighborhoods with high rates of STDs. This paper reports the process and effect of the program from its inception in 1993 through 1996.

Methods

Condom Distribution

The basic intervention was the provision of free condoms in readily visible and

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This paper was accepted August 27, 1998.

accessible sites through health care facilities and private businesses serving populations at high risk for STDs and HIV.

Public sector. In May 1993, the secretary of the Louisiana Department of Health and Hospitals mandated that condoms would be made accessible to all clients of publicly funded health department clinics. Condoms were made available at no charge in all parish (county) public health clinics (n = 93), community mental health centers (n = 39), and public substance abuse treatment centers (n = 29). Over the course of the project, 35 private physicians, 105 community health care centers, and at least 27 housing projects also made condoms available. Training on condom use, condom efficacy, and increasing condom accessibility was conducted throughout the state. We encouraged staff to make condoms freely available, not to limit the number that people could take, and to allow clients to take them without asking permission (this included posting signs announcing that the condoms were free). We also encouraged staff to take condoms home and distribute them to anyone they knew who might need them. In addition, we asked staff to notify us of any complaints or problems that might arise. Condom availability in public clinic sites was assessed by standardized annual observation surveys.

Private sector. Businesses in neighborhoods with the highest rates of STDs were invited to distribute condoms at no charge to their customers. The program was piloted in one area of New Orleans in 1993 and then gradually expanded statewide in 1994. On average, approximately 1000 businesses were actively participating in the program at any time. Participating businesses included 324 convenience stores; 388 bars, nightclubs, and liquor stores; 145 beauty salons and barbershops; as well as other businesses such as tattoo parlors, dry cleaners, and low-cost motels. In addition, all community-based organizations involved in HIV/STD prevention activities such as street outreach or other types of interventions were supplied with large quantities of condoms for distribution in their programs.

We tracked the number of condoms distributed as well as where they were distributed at the parish level statewide. We obtained data for a 2-year period on the number of condoms distributed commercially through wholesalers to 60% of the Louisiana supermarkets and drugstores from Towne and Oller, Associates, a marketing research firm.

Evaluation

Surveys were conducted to determine whether there was a change in self-reported sexual behavior during the course of the intervention, particularly in condom use at the last sexual encounter and in number of sex partners in the previous 12 months.

Clinic survey. In 27 public clinics, surveys were distributed to women who visited the clinic for family planning or prenatal visits, who brought their children for immunizations or well-child visits, or who came for required visits for the Women, Infants, and Children (WIC) Program. Clinics were selected to represent all 9 geographic regions of Louisiana and to include both urban and rural parishes. Because approximately 70% of all Louisiana children receive immunizations through the public health clinics, this surveyed population was fairly representative of the state's females of childbearing age, an important subset of the young, sexually active general female population. The questionnaires were anonymous and self-administered. Adults were given the questionnaires by the registration clerk and asked to drop them in a box when completed. Refusal rates could not be calculated because attendance logs at these clinics were not available. The questionnaires were distributed 2 to 4 times each year over a 1- to 2-week period from February 1994 through December 1996. The data were analyzed for each 12-month period. Logistic regression was used to control for type of service received at the clinic, race, education, and marital status when measuring changes in self-reported condom use and changes in the number of sex partners over time.

Street survey. We conducted interviewer-assisted street-intercept surveys of African American men, aged 15 through 45 years, in targeted areas of New Orleans. The selected neighborhoods for these surveys were those with the highest rates of gonorrhea in New Orleans, including one zip code in which 100 businesses had been recruited to distribute free condoms in 1994 (Area A) and sociodemographically matched comparison areas in which businesses had not been recruited during this first year of the program (Area B). These surveys were repeated in both areas in 1995 and 1996. Each year, participants were recruited on 20 selected street corners (10 Area A, 10 Area B). Refusal rates were between 10% and 20% each year.

Results

Condom Distribution

Before the statewide condom social marketing program was initiated, approximately 323 000 condoms had been distributed in 1992. Our program increased distribution to 8 735 000 condoms in 1994, 11 900 000 condoms in 1995, and 13 360 000 condoms in 1996. Although most condoms were distributed through health clinics, more than 2 million condoms were distributed by private businesses in high-risk neighborhoods in both 1995 and 1996 (Figure 1). During the period of the sharpest increase in free condom distribution (May 1993 through June 1995), the number of condoms sold commercially in Louisiana stayed constant at a rate of approximately 2 million per year.

Before the program started, free condoms were provided in small quantities at the discretion of the health care providers. After the first year of the program, 96% of all public clinics provided condoms; by the end of the second year, all clinics had accessible condoms, and 67% made arrangements for clients to help themselves to condoms without having to ask.

Despite the controversial nature of condom distribution, elected officials made only a few complaints during the first year of the project. These were addressed by providing facts about the STD and HIV epidemics in Louisiana. Since that time, we have received no complaints about the distribution of free condoms from citizens, religious groups, or elected officials.

In contrast, many health care workers complained about the program, but as patients showed appreciation, acceptance by health care workers improved. Again, we received no complaints after the first year.

In the private sector, approximately 50% of businesses approached agreed to participate. Over time, many business owners who heard about the condom distribution program contacted staff and requested that they be included. Because some of the businesses involved were operating on a marginal scale, approximately 10% dropped out of the program annually because they closed or changed management, and fewer than 1% dropped out because of customer complaints. These businesses were readily replaced in the program by other businesses.

Table 1 shows the number of outlets participating in the private-sector program in the comparison areas of New Orleans in 1994 through 1996. We initially tried to limit condom distribution to Area A. However, the intervention was popular and desired by local businesses. Community-based organizations recruited sites in our comparison area (Area B), so that by 1996, the number of commercial outlets in Area B began to approach the number in Area A.

Evaluation

Clinic survey. Respondents in the clinic survey were women who reported having

sex in the past 12 months. The distribution of other demographic characteristics by the year of the survey is shown in Table 2. Although the distribution of respondents' race did not differ across each year, the respondents' marital status and type of clinic visited differed during the study period.

In the 3 study years, the proportion of women reporting 2 or more sex partners did not show a temporal trend (17% in 1994, 12% in 1995, and 18% in 1996). However, there were race-specific changes in respondents' reporting of condom use. From 1994 to 1996, self-reported condom use at the last sexual encounter did not change among White women (18% in both 1994 and 1996) but increased among African American women (from 28% to 36%) and increased sharply (from 30% to 48%) among those African American women who reported 2 or more partners in the previous year (Table 2). After logistic regression was used to control for marital status, type of clinic visited, race, and education, there remained a substantial increase in condom use in 1996 compared with 1994 among all women with 2 or more sex partners (odds ratio [OR] = 1.36; 95% confidence interval [CI] = 1.10, 1.67) and among African American women with 2 or more sex partners (OR = 1.42; 95% CI = 1.13, 1.91). The number of sex partners over the 3 years did not change among respondents (OR = 1.1; 95% CI = 0.98, 1.22).

Among all respondents, other measures increased, indicating greater program exposure and increased access to condoms. Figure 2 shows consecutive increases in the percentage of women who used condoms at the last sexual encounter ($P < .04$), had condoms ($P < .0001$), obtained free condoms ($P < .0001$), knew where to get free condoms ($P < .0001$), and reported that their friends used condoms ($P < .0001$).

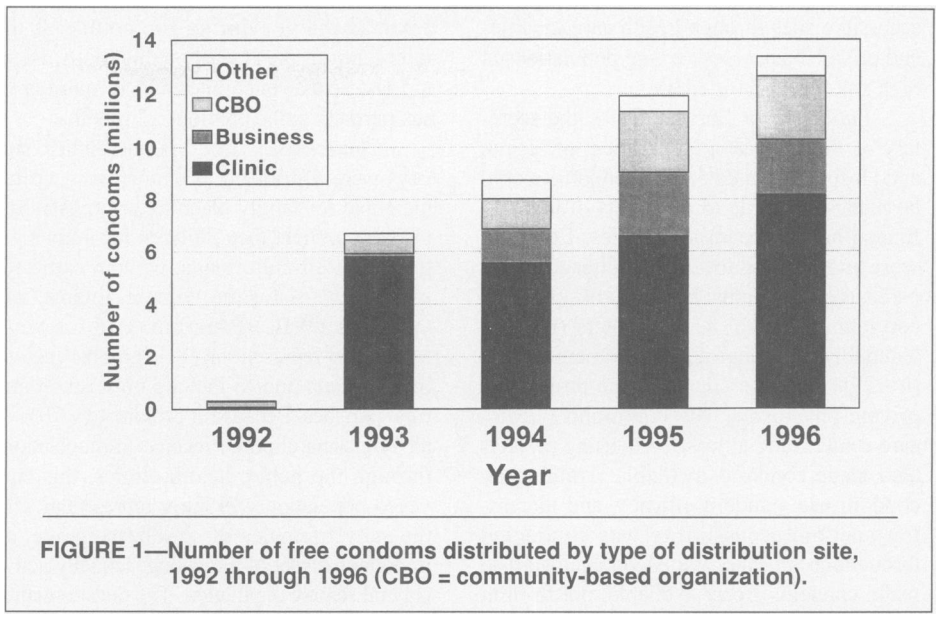

FIGURE 1—Number of free condoms distributed by type of distribution site, 1992 through 1996 (CBO = community-based organization).

Street survey. Each year, between 500 and 600 men answered the street-intercept survey in New Orleans. The respondents did not differ across years or between Area A and Area B, except in year 1 when the median age in Area B was slightly older than that in the intervention group (29.3 vs 28.7, $P = .01$). The percentage of respondents with less than a high school education and the percentage unmarried did not vary significantly across years or between Areas A and B (see Table 1).

Table 1 shows the secular trend in self-reported condom use at the last sexual encounter and the number of sex partners in the previous 12 months among survey respondents. Condom use increased from 40% to 56% in Area A (the area in which the private-sector program was initiated) between 1994 and 1995 ($P < .0001$) and decreased slightly to 52% the following year ($P = .45$). In Area B, in which the private-sector program was implemented in 1995, condom use increased from 41% to 48% between 1994 and 1995 ($P = .06$) and increased to 55% in 1996 ($P < .003$ for 1996 vs 1994). The percentage of persons reporting 2 or more sex partners was similar between the 2 areas and did not change significantly during the survey periods.

TABLE 1—Characteristics of New Orleans Street Survey Respondents and Condom Outlet Density, 1994 Through 1996

	1994		1995		1996	
	Area A	Area B	Area A	Area B	Area A	Area B
Condom outlets/1000 persons	1.93	0.54	1.89	0.90	1.67	1.07
Education						
<HS	122 (40%)	155 (40%)	103 (35%)	124 (43%)	84 (33%)	95 (39%)
≥HS	185 (60%)	233 (60%)	191 (65%)	166 (57%)	168 (67%)	150 (61%)
Age, y						
15–24	122 (40%)	146 (37%)	144 (46%)	163 (55%)	124 (49%)	122 (49%)
25–34	91 (29%)	135 (34%)	77 (25%)	67 (22%)	67 (26%)	49 (20%)
≥35	95 (31%)	115 (29%)	91 (29%)	68 (23%)	62 (25%)	76 (31%)
Marital status						
Married	61 (20%)	63 (17%)	60 (19%)	52 (18%)	58 (23%)	53 (22%)
Unmarried	243 (80%)	299 (83%)	251 (81%)	242 (82%)	194 (77%)	191 (78%)
Condom use at last sexual encounter						
Yes	122 (40%)	161 (41%)	169 (56%)	142 (48%)	131 (52%)	135 (55%)
No	184 (54%)	232 (59%)	135 (44%)	153 (52%)	119 (48%)	110 (45%)
Sex partners in last year						
1	98 (33%)	110 (28%)	80 (28%)	65 (24%)	80 (32%)	61 (25%)
≥2	202 (67%)	276 (72%)	207 (72%)	210 (76%)	171 (68%)	185 (75%)

Note. HS = high school.

When we combined data from the 2 areas, we found other changes over the survey years suggesting that respondents were obtaining and using the program's condoms. From 1994 to 1996, the percentage of respondents who identified the brand of condom being distributed through the health department program as the one they used last increased from 40% to 61% ($P < .0001$), the percentage who reported they had obtained free condoms increased from 61% to 74% ($P < .001$), the percentage who knew where to obtain free condoms increased from 63% to 82% ($P < .0001$), and the percentage who reported not owning any condoms decreased from 32% to 22% ($P < .0002$).

TABLE 2—Characteristics of Statewide Clinic Survey Respondents, 1994 Through 1996

	1994	1995	1996
Total no. surveyed	1614	1706	1787
Race			
African American	710 (45%)	677 (40%)	763 (43%)
White	813 (51%)	954 (57%)	957 (54%)
Other	61 (4%)	51 (3%)	50 (3%)
Age, y			
15–24	NA	813 (51%)	877 (50%)
25–34	NA	622 (38%)	652 (37%)
≥35	NA	202 (12%)	211 (12%)
Marital status[a]			
Married	570 (44%)	844 (50%)	808 (46%)
Unmarried	739 (56%)	859 (50%)	968 (54%)
Type of clinic service			
WIC/Immunization	1211 (80%)	1283 (76%)	1141 (66%)
FP/Prenatal	230 (15%)	280 (17%)	435 (25%)
Other	82 (5%)	109 (7%)	146 (8%)
Education			
<High school	455 (30%)	509 (31%)	474 (28%)
≥High school	1076 (70%)	1131 (69%)	1221 (72%)
Condom use at last sexual encounter			
African American[b]	697	659	748
1 sex partner	149 (27%)	173 (32%)	183 (33%)
≥2 sex partners	46 (30%)	42 (39%)	89 (48%)

Note. NA = not available; WIC = Women, Infants, and Children; FP = family planning.
[a]Not collected from the first 305 respondents.
[b]Includes only women who have been sexually active in the past 12 months.

Discussion

We successfully implemented a statewide condom distribution program and found that the program was associated with increases in self-reported condom use in high-risk populations, without being associated with increases in number of sex partners. These results indicate that condom social marketing in the United States is indeed feasible, acceptable, and a promising intervention to decrease transmission of STDs, including HIV. Our conclusions are based on (1) consistent increases in reports of knowledge and behavior associated with condom use (e.g., knowing where to obtain free condoms, obtaining free condoms, owning condoms), (2) increases in reports of condom use, and (3) the temporal and spatial relationship between increases in self-reported condom use in the New Orleans street-intercept surveys and the availability of free condoms at neighborhood business sites.

Our evaluation was based to a large extent on self-reported condom use in surveys. Although this measure is commonly used to evaluate HIV prevention programs, it may not necessarily reflect actual condom use.[17] Objective markers such as rates of other STDs support the validity of increases in self-reported condom use. From 1992 to 1996, rates of primary and secondary syphilis decreased from 63/100 000 to 13/100 000 (–79%), and rates of gonorrhea decreased from 343/100 000 to 222/100 000 (–35%) in Louisiana. Because our intervention was statewide, it is impossible to estimate what might have happened to these rates if we had not implemented the program. However, taken together with the increased reports of condom use among high-risk men and women, these findings suggest that condom distribution does not increase risk behavior and may have contributed to reduced STD transmission.

We were unable to conduct a controlled trial of this intervention, in part because of the popularity of the program as a response to an urgent and critical public health problem. Community-based organizations working to prevent AIDS did not consider it ethical to limit large-scale free condom distribution to only a portion of neighborhoods in New Orleans with high rates of STDs, even for the purpose of determining effectiveness. Nonetheless, the delayed implementation of the program in Area B in New Orleans did allow us to compare the timing of the introduction of condom availability with changes

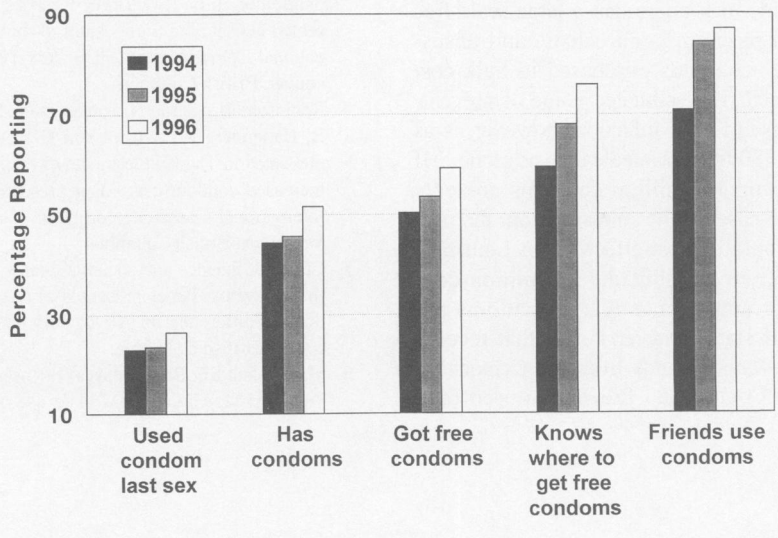

FIGURE 2—Percentage of female respondents in clinic survey reporting knowledge and behaviors about condoms, 1994 through 1996.

in condom use. We found a large increase in self-reported condom use following a sudden increase in condom outlets in Area A, and a gradual increase in self-reported condom use paralleled the slower, but steady, increase in condom outlets in Area B. These findings suggest that the increases were more likely to be a result of the program itself than of unrelated secular trends in condom use.

Large numbers of free condoms were distributed through this program. The program had no apparent effect on commercial sales of condoms at a time when condom sales were declining nationally.[18] This suggests that for persons already purchasing condoms, the availability of free condoms did not lead them to stop purchasing them. Rather, it appears that the program reached a group that was not purchasing condoms previously.

Many small businesses in neighborhoods with high rates of STDs participated, indicating that the approach of distributing free condoms through private distribution sites is both feasible and acceptable. Many business owners noted that the program was an opportunity to serve their communities, and some believed it helped their businesses by providing an additional incentive for customers.

We were surprised at the relatively small opposition to the program from groups traditionally opposed to condoms. We believe that our strategy of confining the program to health facilities, neighborhoods with high rates of STDs and HIV, and businesses (such as bars and alcohol and tobacco outlets) that serve adults with other high-risk behaviors contributed to tolerance of the program. The program's low profile made it relatively invisible to persons not already involved with or concerned about HIV and STDs.

Some may argue that a large-scale free condom program is unrealistic and unsustainable. Condoms purchased in bulk cost $0.05 each. The estimated value of preventing a case of HIV infection, however, is as high as $80 000 for medical costs alone.[19] If distributing 1.6 million condoms prevents only one case of HIV transmission, the program would be cost-effective. In Louisiana in 1996, we distributed 13.4 million condoms, or approximately 3.1 condoms per capita. If states and territories that receive HIV prevention funds from the Centers for Disease Control and Prevention used only 25% of their award in fiscal year 1995 for condom purchases, they would be able to buy from 2.6 (South Dakota) to 6.4 (New York) condoms per capita.[20] Thus, a program of this magnitude is achievable within existing public health budgets.

Given the strong, positive response that this program has received in terms of community participation and acceptance, we conclude that interventions to increase condom accessibility are feasible in the United States and hold significant promise in prevention of HIV infection and other STDs. □

Contributors

Deborah Cohen designed and supervised the intervention, planned and supervised the evaluation, assisted in analyzing the data, and wrote the paper. Thomas Farley assisted in planning and implementing the intervention and the evaluation, analyzing the data, and writing the paper. Jean Roger Bedimo-Etame analyzed the data and assisted in writing the paper. Richard Scribner assisted in designing the evaluation, analyzing the data, and writing the paper. William Ward assisted in designing the evaluation and supervised the street surveys in New Orleans. Carl Kendall assisted in designing the evaluation. Janet Rice assisted in designing the evaluation and analyzing the data. All authors are guarantors of the integrity of the research.

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